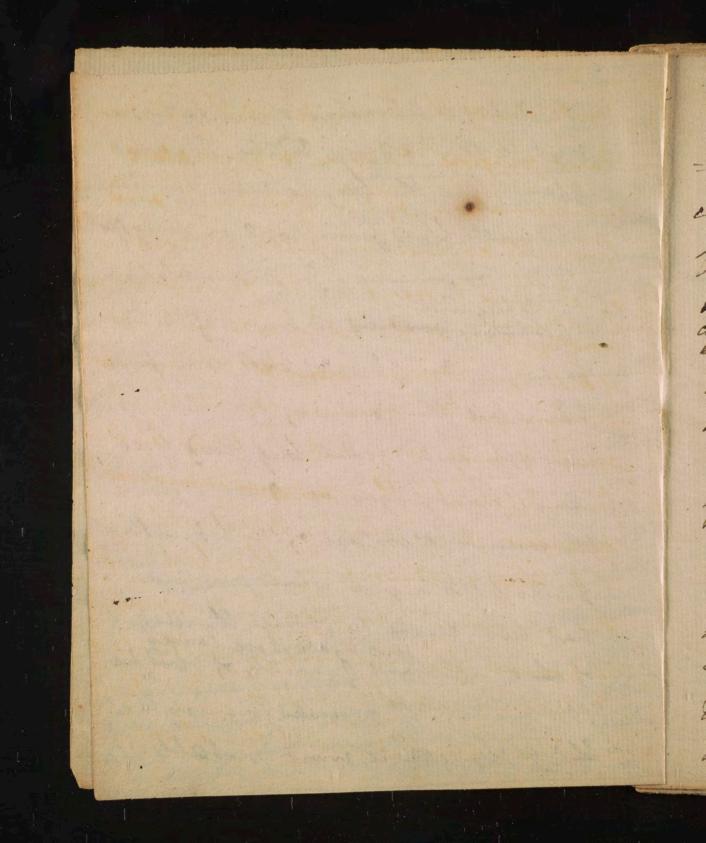
I but come now to treat of the apphalis flates of Juner. Before fenter upon this helyest of thall Jeliver some umarko upon the brain and its appendages which are party of a poly-- eiological and partly of a postrological be practical I twenty you in our physiology that Pratin. the Sphere in early part of our Course to file treating upon the linestations of the blood, I said that the maker of our bodies had questo against the inordinate or turnuttions the blot wepels were unsually excited through - out the Whole System - by the Thypuns gland when it was the am leave -- enal generatity to the lungs, by the

the extensation of the V I formerly expressed from a fact so make ugon the Thyprid glands by ma Congrespes: - busing faturity in Dogs, that this gland ses. - ved to assest and letnin the blood when too foreibly determined to the brain. But I not to be from the small sin of that gland, and from a brand any not aboutting the inferences of more boyen; for experimento I have rijeted that Inprosition. In Reeve in his epay on Cretinism published in the 5 " vol: 03 the Eden": undical and Surgical journal letts us that in those lountries where Cretino are must numerous, many prople of sounds big orone minds have Bronchoule and Butterson is attrigether audurtal. The Theyrord gland, believe arrests newvous determination to the larger pegis brain outs, but never arterial. Its use I believe brain outs, but never arterial. Its use I believe is this largery and speuts.

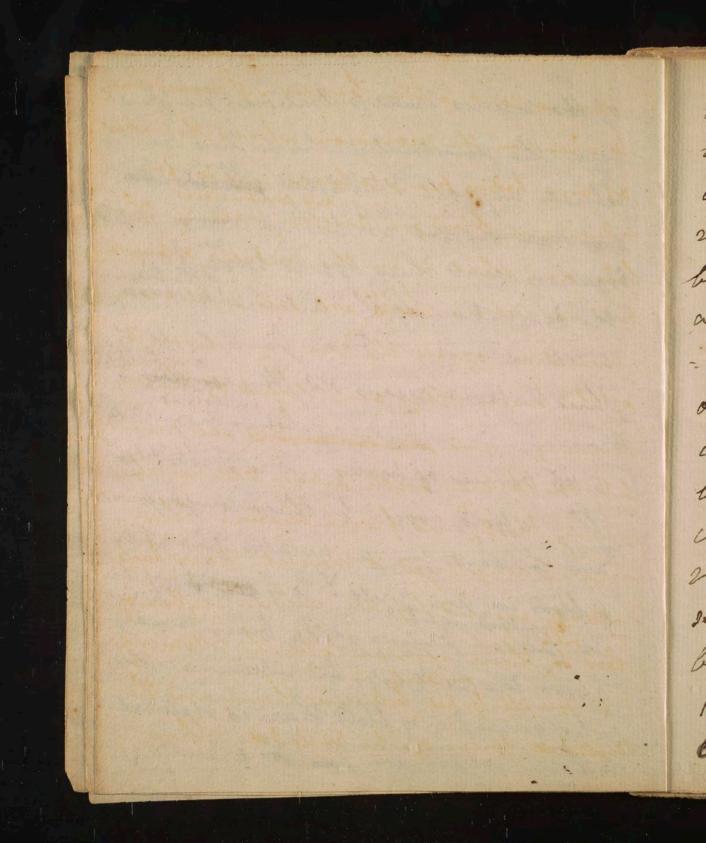
20 Plandule remules when it was too comionsly pro = sent to the Ridweys, & the Thypoid) fer gland when the larynd was over disting too - to with blood from lond, or long spea not *** - laing, or Singing. In Contemplating nd, the the brains of the brains the to an undue flore of blood from fiven, nto from all the Courses of apreplicay, pulwe - sas struduels, from long blood fipeathe nal - king, from anger, and even from ins the recumbent posture of the body in Slup, nds I was 40 to inquire what formision t the 2011 had been anale to obviate the illefuts sent by all those causes to of the a redundant quantity of blood to and j the brain . I suggested framerly that This the of thought it most probable the



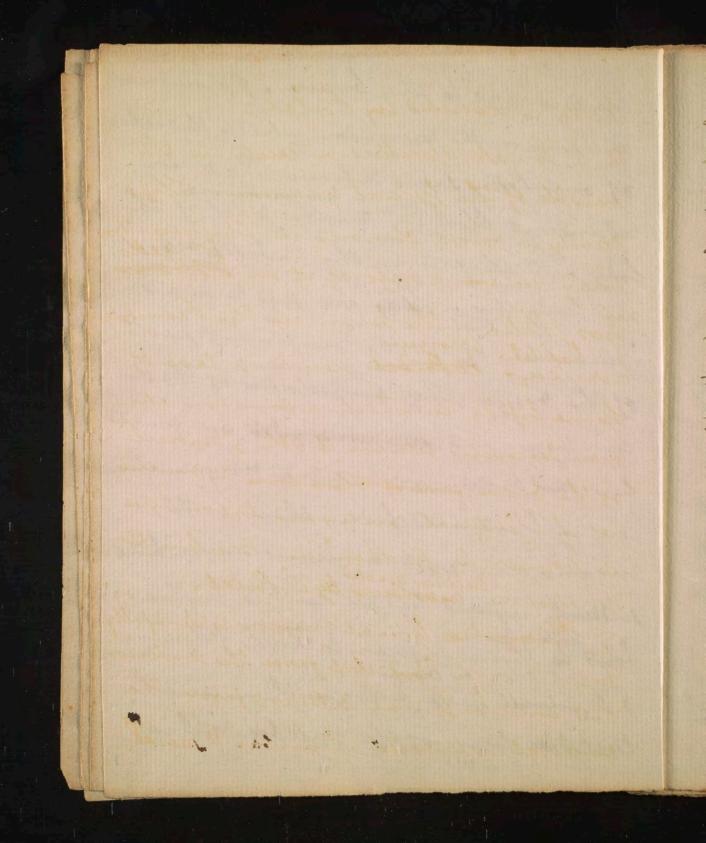
butiles of the brain served this imprortant purpose. Town a more elose commination of this opinion , and from its connections with the means a continuous part of the body I have no doubt of bits Consultrup. Tours to The hungs to the liver and the paneres obviate the ill effects of being over distinded with blood for a while, by their hing to copy the determing way as it were, that is by their enemasing in this bulk, but this cannever take plan in the brain. The Cranisum prevents its dilatation, and this it is said to such a degre as even to present the elevation

Indeed there can be no doubt of this being the Case, Baghiri letts res he found Dij of was meated blood in the Vendricles of the January Anatomist malphissi who died of an apoplexy. allowing the bloodwefsels to be impact impotied of their blood to admit of this large areumlation of it in the Dentie - cles, Still it shows that they are capa-- ble by anyorepriors of affording room for some than five or six owners of revendant blood.

of the arteries into pulsation. In this · fase, the Devetiseles which there cavities give way which we call Ventricles posithe and top our seption on become more prepid together, and thus afford more for nist the distintion of the artires berins with redundant blood. In a Child, of there or four years old, they continued to to contain in a hydro cephalus promis to hie 5 06 brunes of water. It is probably DAthey afford soon by their compression and lowtast for a greater quantity of blood in an abult. It is popible to brain may apoint the wertirdes by retaining a great - ter quantity of blood than is satural to them, when an answel quantity of



blood is sent to the brain . I proudoest to mention the provision which the maker of our bodies sums to have made for and wontinuous the body and that is in the inchalle oblowpeter and Isinalis. These are said to be along - binnation of all the component parts of the brain. They are propelsed of the summe coverings, and water to marches are provided like the brain with arteries & veins which convey blood, and from them. The Encuns comployed to prevent their bing sufferly injured by an undue influx of bood to them appear to be the following. I a small fpace between them and the Contide bones of the Vertebra. This



Cavity is described by Portal 2 a small aperture or cavity in the briddle of the Spinal branow. This cavity is enost obvious in Children you may see in a draft of it in the hospital. morgaini describes a case of Spina bifida in which a communication was discovered between it &the 3 benticle of the brain race of This love by me ans of this internal cavity, and its existence is admitted by Picothomeni. Bouchin & malphige and for Portal. 3 the traction friend marrow is plentifully Jupplied with blood repels from the anterior and posterior Spinal artires & from the vestebral, intercustal, burstas & Jacral

N DePortal mentions two Christing facts in hysport of the openious I have advanced. I for a thild affected with Speria bifida he distinctly saw the tumor enlarged in every respiration, and lipsul in every expiration. This Whild hid. The found after death a Cavity large eno to admit a grill which Communicated with the 3" contricte of the brain . 2 The opened & inspellette Vestebree of sweral dogs & Cats & distinctly Her the fredulla Spinalis enlarged & lefoned with each inspiration, and expiration. Thise mutions extended any to 3 and 4th the Cervical vertebra in both cases. vol: N. p: 66.

by

4

a

f

1

to

9

.

#

,

asteries. The Veins which return the Hord which is carried by them are 4 in humber and lagger than the mother on the production, and two are lateral. They are so large , fortal suys that ming let be called a Sinus. These Vieno, probably serve by their distension to and the two Cavities ty the hand mentioned in reliving the medull adolangata Hopinalis from the ill effects of reducedount blood when the discases of the the spinal Irramon, or the brain in the Virlebra the those favour the thirty of have Silverio of the voes of the cavities &

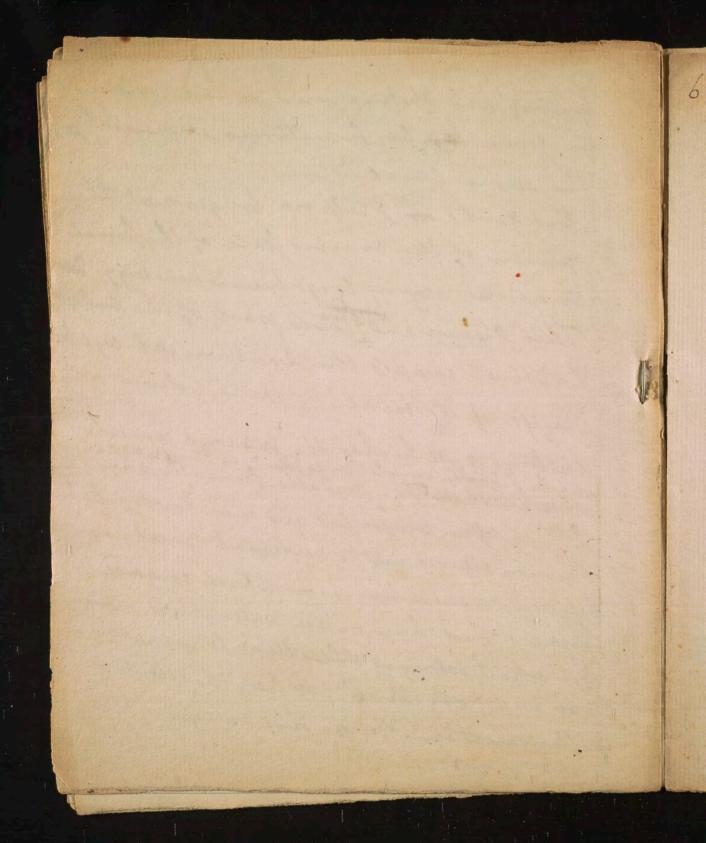
protected the touts and evo to the Costs of the Spinal Inurow, whereas the touts and evo to the sees the touter in the

in every leaspest with the Yundre up his case to be supposed to be

tida Sines in it which have been mentioned. 1 The Spines Bifida is nothing but an external droppy of the Springs menow in see every respect similar to theld.
- ternal drogory of the brain, except on, The & external Droppy of the brain is induced by an opening of the futures of the brain - the Spine bifida, by the absence of a primal process of inthe Best bree . Bot formations it appears we are too gaping of or opening between two of the Destable, There is a case upon the Discharge of Waterby waterby in which a puncture of the Spina Bifida module the Collapse of a brain distanded with Hydro. - uphalus caternus. In this ease the water 2 à severe pain in the back generally

au M a be ho be - 神を行む。か w It - 0 3 Agrees of great morbid action as certainly as a pain in the head. may not this be occasioned by the carities of inns of have described, heising so overcharged with blood, as no longer to privento ito prejo upon and histending the dura topical enamon, and thus to to exite the pain & have menting 3 may not the books of the bowels be areasioned of times by presion of the accioned of times by presion of 4 the news which if sue from the fine 7 by too much blood, than by their t Land not the weekness in the lower

hi in At 4 1 W 4 himles, and Obstructions in the bowels in proces to be formationes indued by the same Carese? -But gent: If I will no longer rest the Opinion of the Ensibil State of the Spinal Inamon upon amjertieres & analogy. Des This obscure and Eased part of the body has not escaped the anatomical eyel knife of De Portal. In the 4th bolume of his constony 13:192 he has the following umarks "
which I start translationle the grindly friends the 22) is often comparefied and even contracted by humors effersed into the vertileal canal, on between its membranes, on which engage its Surface. These humors are water, blood, mucus Lymph, Zelatinours & Steatornatouro enalters -& puo or ichor which has bun the effect of inflamenation. Besides these machs of discuse



the Drados induration, fofteness, inflamination lapperation and Muration have been fruit in the medula Spinalis, and there is no Doubt but that like the brain is is capable of being affected by Concupion: He then correbades by saying" in a love, the discours of the medula princhis have a great affinite with the bisenses of the brain, and are enoue common than is generally Insposed! In the two to this new antig facts and opinions that have been delivered "are I the Respite and Safets of It in Diseases of the brain from reducant blood. Were to live agreeably to reason, the ventricles and better Sincess of the brain would be huffrient to retire present injury to it in common

3 & treating upon pulmonary Con-= numption I advised the application of Bhoters between the shoulders along the Cervical & both Dorsal Vistabre . of have repeatedly feen them to more Hervice when applied there, than to the Tides or breast. hay not the nason why of this be - the blister lepring Congestion in the Spinal Viste bre which supply a portion of news which wente with the par vagum & great lympatheticherous which rope are distributed to the Thornie & abbaninal viscera? Yeary not the officery of a Bury undy pitete pluster to the external parts of the Cervicul and dossaf vertebre, and of other stimulating applications to the surping

cons, but the misuits, pleasures directs of civilized life, render them two search, for that purpose. The greantily of bloodsent to the brain arguines the aid of the lancetto apist the Ventricles and lateral Sinceries the Uses & have recribed to him. 3 Trom the Weste Cavities which I have Docable in the Spinal Inamon, it is alike obvious that many biocases in the herrores Ulmseular parts of the body which are supplied with newed from the Spenal manow, are, from the inability of those cavities to afford affection room for all the blood that is sent to them, indues by tor some the blood in the Grinal mussow, and that they require, experially in their frist stage, resuldies, the revene of what are too often

Lough - be owing to in their inducing such dictions in the Spinal manor tos 1 V This, - from the samerely of its Canoe with Hytrouphalus intimus

prescribed for them; I mean depliting se-- Evedrio. I shall illustrate who be by sorfue to the stage to were what & mean by a reference of a single discase.

There said the Hydro uphalms interness is
a induced by a much being the to the best to the best brain as to produce a papage of its ocrous parts into the Uentricles, on by the force of the blood foring open the or widing the Sutures com and potting the is theres pro-Juing to My dro cephalus inders exterens.

There said further that a discuse similar to the latter is produced for amore by the same lauses.

In the Spinul marrow by the same lauses.

The Abrital Hobbs water is found in the its lavities, the may be called Thy Dro lystobralis intermo, The Spins
Bifida is produced by water forcing its

--V which are the the effects of fines. I have called them apphalie Hates of Jenes.

way outwards by the distruction of a Grinal process, or by inscrutating itself between two of the Vertebra this enight be called a Hydrovertebra. = lis exterens. The to be the both to I shall apply the facts & principles I have thus delivered to several other diseases in the signed of our letures.

Thowever quet the procession which the pentiarities in the brain I have min noticed appear to be intended to prevent its discuses, from many lincounstancesthey are bot always sufficient in lamon · with the Spleen, Thymus & Theyond glands & glandula renallo for that purpose. The discuss of the brain from an under determination of blood to it are memerous. at present, Ithall takes confine 2 myself only to the discuses

7

-

